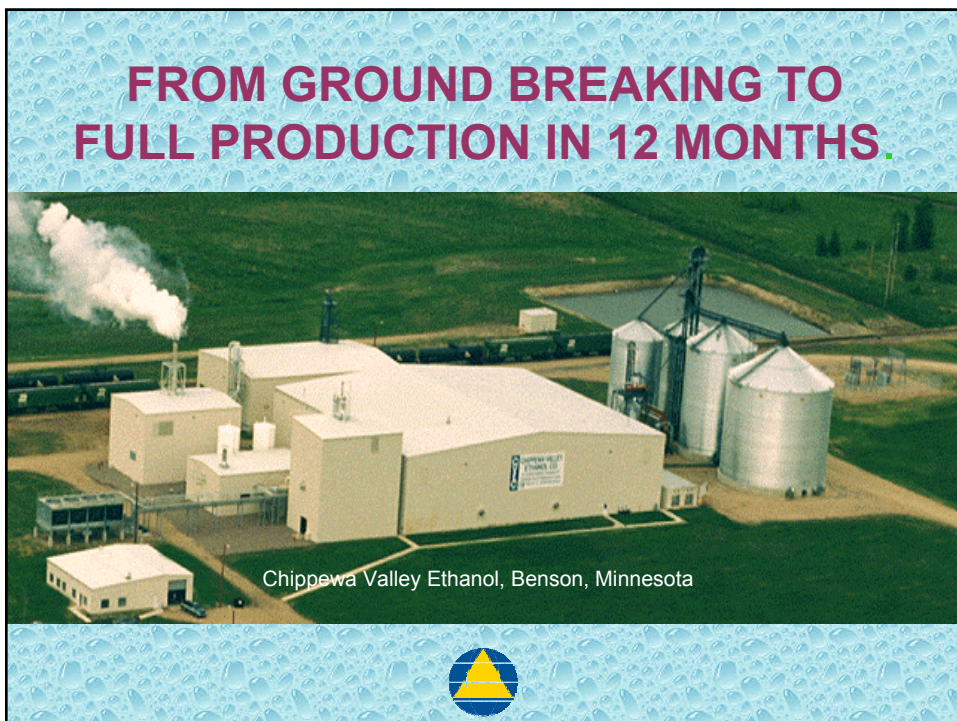
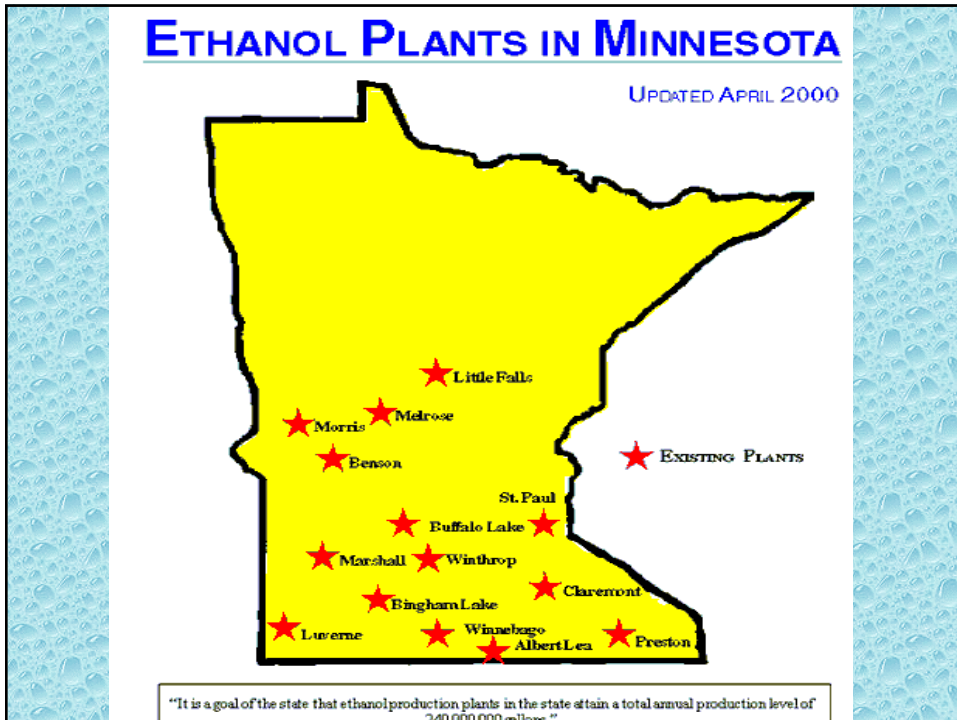




Unconventional solutions, unrivaled results.

Larry Johnson

- **25 years Production Agriculture.**
- **15 years Ethanol Consultant**
- **3 years Delta-T Corporation**
Business Development Manager



ACE Ethanol



ACE Ethanol



WHAT'S DRIVING ETHANOL DEMAND?

- **World energy demand and high crude oil prices**
- **The Clean Air Act Amendments of 1990**
- **Unprecedented U.S. gasoline demand**
- **The phase-out of MTBE from U.S. gasoline**
- **Continued demand for gasoline octane**
- **U.S. oil refineries are operating at capacity**
- **A general movement toward renewable energy**



WHAT MISTAKES WERE MADE PREVIOUSLY BY ETHANOL PLANTS?

- **Inadequate Technology**
- **Inefficient Plant Design**
- **Inaccessible Markets**
- **Under Capitalization**
- **Poor Management**



Ethanol Plant Requirements

1. SITE QUALIFICATIONS

2. BUSINESS ECONOMICS

3. PROJECT FINANCING

1. Site Qualifications

- Rail**
- Roads**
- Water**
- Boiler Fuel**
- Electricity**
- Permits**
- Community Acceptance**

2. Business Economics

- **Feedstocks**
- **Markets**
- **Costs and Efficiencies**
- **Livestock**

3. Project Financing

- **Grants**
- **In-Kind**
- **Investor Equity**
- **Debt Finance**

Intangibles

- **Leadership**
- **Timing**
- **Image**
- **Dedication and Hard Work**

In Summary...

**THE OVERRIDING AND MOST
IMPORTANT ISSUE IS,**

PROFIT!

and...

The Most Important Profit Factor Is...

**THE RELATIONSHIP
BETWEEN THE
FEEDSTOCK PRICE AND
THE PRICE OF
ETHANOL.**

What Level Profitability??

- **Ethanol will Definitely Add Value!**
- **Energy up? Agriculture Down?**
- **Agriculture up? Energy Down?**

**The Correct Decision
Will Require Accurate
Information, Good
Planning, a Little Luck
and Dedication...**

Hawaii Specific Considerations

- **Maintaining the Unique Island Character**
- **Enhancing and Diversifying State Economy**
- **Promoting Desirable Land Use**
- **Maintaining Clean Environment**
- **Providing a High Performance Fuel**
- **Considering Future Technology**
- **Insuring Energy Security**
- **Creating a Workable Public Policy Environment**
- **Serving the Hawaiian Citizens**